

WHAT IS CLAIMED:

1. An expression vector comprising a nucleic acid that encodes a peptide of 50 amino acids or less in length wherein said peptide comprises at least seven contiguous amino acids of an amino acid sequence selected from the group consisting of HBenv₂₄₈₋₂₅₇, HBenv₂₄₉₋₂₅₇, HBenv₂₄₉₋₂₅₈, HBenv₂₅₀₋₂₅₈, HBenv₂₅₁₋₂₅₉, and HBenv₂₅₁₋₂₆₀.
2. The expression vector of claim 1, wherein the peptide is 25 amino acids or less in length.
3. The expression vector of claim 2, wherein the peptide is 8, 9, 10, or 11 amino acids in length.
4. The expression vector of claim 1, further wherein the nucleic acid encodes the peptide and at least (one additional immunogenic peptide).
5. The composition of claim 4, wherein the additional immunogenic peptide elicits a T-helper cell-mediated immune response.
6. The composition of claim 4, wherein the additional immunogenic peptide elicits a cytotoxic T lymphocyte response.
7. An expression vector comprising a nucleic acid that encodes a peptide consisting of the amino acid sequence that is HBenv₃₄₈₋₃₅₇.
8. The expression vector of claim 7, wherein the nucleic acid encodes the peptide and at least one additional peptide.
9. The composition of claim 8, wherein the additional immunogenic peptide ^{no ant} elicits a T-helper cell-mediated immune response.
10. The composition of claim 8, wherein the additional immunogenic peptide ^{ant} elicits a cytotoxic T lymphocyte response.

11. A method of stimulating a cytotoxic T cell response, said method comprising administering an expression vector comprising a nucleic acid that encodes a peptide of 50 amino acids or less in length wherein said peptide comprises at least seven contiguous amino acids of an amino acid sequence selected from the group consisting of HBenv₂₄₈₋₂₅₇, HBenv₂₄₉₋₂₅₇, HBenv₂₄₉₋₂₅₈, HBenv₂₅₀₋₂₅₈, HBenv₂₅₁₋₂₅₉, and HBenv₂₅₁₋₂₆₀.

12. A method of stimulating a cytotoxic T cell response, said method comprising administering an expression vector comprising a nucleic acid that encodes a peptide consisting of the amino acid sequence that is HBenv₃₄₈₋₃₅₇.

SF 1226811 v1

11/11/2011 11:11:11 AM